Amendments to the Claims

This listing of claims shall replace all prior versions, and listings, of claims in the instant Application.

- 1. (currently amended) A starch and fiber mixture comprising from about 0.01% to about 2.0%, by weight, fiber and about 0.1% to about 20%, by weight, uncooked starch, wherein the starch and fiber mixture is applied to a paper mat during the paper making process with the fiber allowing the starch to remain on the paper mat and the starch is cooked during the paper making process.
- (original) The starch and fiber mixture of Claim 1 wherein the fiber has a particle size, in length, of greater than zero and up to 0.08 inches.
- (original) The starch and fiber mixture of Claim 1 wherein a source of the fiber is white water that has been filtered through a pressure screen.
- (original) The starch and fiber mixture of Claim 3 wherein the pressure screen is a 120° pressure screen.
- (original) The starch and fiber mixture of Claim 1 wherein the starch is derived from a source selected from the group consisting of corn, wheat, barley, tapioca, rice, potato and combinations thereof.

Application No. 10/712,699 Amendment dated January 4, 2005 Response to Office Action Mailed October 5, 2004

- 6. (currently amended) A paper mat comprising a starch and fiber mixture applied to the paper mat during a paper making process wherein the starch and fiber mixture has having a fiber content of about 0.01% to about 2.0%, by weight, and a an uncooked starch content of about 0.1% to about 20%, by weight and the starch and fiber mixture is applied to a paper mat during the paper making process with the fiber allowing the starch to remain on the paper mat and the starch is cooked during the paper making process.
- (original) The paper mat of Claim 6 wherein a source of the fiber is white water that has been filtered through a pressure screen.
- 8. (original) The paper mat of Claim 6 wherein the starch and fiber mixture is sprayed onto the paper mat and the paper mat is heated thereby gelatinizing some or all of the starch.
- 9. (currently amended) A paper making process comprising the steps of forming a paper mat by sending pulp and process water to a head box, having the process water deposited from the head box onto a wire screen, removing the paper mat from the wire screen and having the paper mat further processed to obtain paper and applying a starch and fiber mixture comprising from about 0.01% to about 2.0%, by weight, fiber and about 0.1% to about 20%, by weight, starch to the paper mat wherein the pulp and process water is filtered through the paper mat to form white water which is

Application No. 10/712,699

Amendment dated January 4, 2005

Response to Office Action Mailed October 5, 2004

removed from the wire screen and moved into a pressure screen
that obtains accepts and rejects and the starch and fiber mixture
comprises the accepts.

- 10. (canceled)
- 11. (currently amended) The process of Claim 40 9 wherein the starch and fiber mixture is applied to the paper mat after the paper mat is removed from the wire screen but before the further processing.
- 12. (canceled)
- 13. (currently amended) The process of Claim 12 9 wherein the pressure screen is a 120° pressure screen.
- 14. (currently amended) The process of Claim 12 9 wherein the accepts comprise fiber having a particle size, in length, greater than zero and up to about 0.08 inches.
- 15. (currently amended) The process of Claim <u>40 9</u> wherein the paper mat is heated and the starch is cooked.
- 16. (original) The process of Claim 9 wherein the starch and fiber mixture is applied to the paper mat by means selected from the group consisting of spray bars, curtain coaters and size presses.
- 17. (original) The process of Claim 9 wherein the starch and fiber mixture is diluted prior to application of the starch and fiber mixture to the paper mat.

- 18. (currently amended) A process for making a starch and fiber mixture for application to a paper mat during the papermaking process to allow the starch to remain on the paper mat and the starch is cooked during the paper making process comprising the steps of adding a fiber source to a an uncooked starch slurry, allowing for thorough wet out of the starch and mixing the fiber source and the starch slurry at a temperature of about 32°F to about 140°F wherein the starch and fiber mixture does not comprise flocculant.
- 19. (original) The process of Claim 18 wherein the fiber source comprises accepts from the treatment of white water from a papermaking process in a 120° pressure screen.
- 20. (currently amended) A method of filtering white water <u>obtained</u> from <u>the formation of a paper mat on a wire screen during a</u> papermaking process comprising the steps of providing a pressure screen, <u>introducing filtering</u> the white water <u>from the wire screen</u> into <u>in</u> the pressure screen, generating accepts and rejects from the pressure screen wherein the accepts comprise fiber having a particle size, in length, of greater than zero and up to about 0.08 inches.
- (original) The method of Claim 20 wherein the pressure screen is a120° pressure screen.